

Table 2-1. Health Benefits Associated With Regular Physical Activity

Children and Adolescents
<ul style="list-style-type: none">▪ Improved bone health (ages 3 through 17 years)▪ Improved weight status (ages 3 through 17 years)▪ Improved cardiorespiratory and muscular fitness (ages 6 through 17 years)▪ Improved cardiometabolic health (ages 6 through 17 years)▪ Improved cognition (ages 6 to 13 years)*▪ Reduced risk of depression (ages 6 to 13 years)
Adults and Older Adults
<ul style="list-style-type: none">▪ Lower risk of all-cause mortality▪ Lower risk of cardiovascular disease mortality▪ Lower risk of cardiovascular disease (including heart disease and stroke)▪ Lower risk of hypertension▪ Lower risk of type 2 diabetes▪ Lower risk of adverse blood lipid profile▪ Lower risk of cancers of the bladder, breast, colon, endometrium, esophagus, kidney, lung, and stomach▪ Improved cognition*▪ Reduced risk of dementia (including Alzheimer's disease)▪ Improved quality of life▪ Reduced anxiety▪ Reduced risk of depression▪ Improved sleep▪ Slowed or reduced weight gain▪ Weight loss, particularly when combined with reduced calorie intake▪ Prevention of weight regain following initial weight loss▪ Improved bone health▪ Improved physical function▪ Lower risk of falls (older adults)▪ Lower risk of fall-related injuries (older adults)

Note: The Advisory Committee rated the evidence of health benefits of physical activity as strong, moderate, limited, or grade not assignable. Only outcomes with strong or moderate evidence of effect are included in this table.

*See [Table 2-3](#) for additional components of cognition and brain health.

The Physical Activity Guidelines for Americans, 2nd edition; Chap 2, p. 32, Retrieved from <https://health.gov/paguidelines/second-edition/>, 2-3-19

Table 2-3. The Benefits of Physical Activity for Brain Health

Outcome	Population	Benefit	Acute	Habitual
Cognition	Children ages 6 to 13 years	Improved cognition (performance on academic achievement tests, executive function, processing speed, memory)	●	●
	Adults	Reduced risk of dementia (including Alzheimer's disease)		●
	Adults older than age 50 years	Improved cognition (executive function, attention, memory, crystallized intelligence,* processing speed)		●
Quality of life	Adults	Improved quality of life		●
Depressed mood and depression	Children ages 6 to 17 years and adults	Reduced risk of depression Reduced depressed mood		●
Anxiety	Adults	Reduced short-term feelings of anxiety (state anxiety)	●	
	Adults	Reduced long-term feelings and signs of anxiety (trait anxiety) for people with and without anxiety disorders		●
Sleep	Adults	Improved sleep outcomes (increased sleep efficiency, sleep quality, deep sleep; reduced daytime sleepiness, frequency of use of medication to aid sleep)		●
	Adults	Improved sleep outcomes that increase with duration of acute episode	●	

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*Crystallized intelligence is the ability to retrieve and use information that has been acquired over time. It is different from fluid intelligence, which is the ability to store and manipulate new information.

The Physical Activity Guidelines for Americans, 2nd edition; Chap 2, p. 40, Retrieved from <https://health.gov/paguidelines/second-edition/>, 2-3-19